



## **PATENT**

### IN THE UNITED STATES PATENT OFFICE

Serial No.:

10/581,353

Filed:

May 31, 2006

For:

TREATMENT UNIT FOR

THE WET-CHEMICAL

**ELECTROLYTIC TREATMENT** 

OF FLAT WORKPIECES

Inventors:

Uwe Hauf, Henry Kunze, and Ferdinand Wiener

Atty Doc. No.: 084-06

### Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service First Class mail postage prepaid in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria VA

22313-1450, on July 27, 2006

John F. McNulty, Rog No. 23,028

Dated: July 27, 2006

## **COVER LETTER WITH CERTIFICATE OF MAILING**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Enclosed herewith please find the following:

- (1) Cover Letter with Certificate of Mailing:
- (2) International Preliminary Examination Report on Patentability (7 pages); and
- (3) Paul & Paul Postcard to be returned by the PTO.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES ASSOCIATED WITH THIS COMMUNICATION, OR CREDIT ANY OVERPAYMENT, TO PAUL & PAUL DEPOSIT ACCOUNT NO. 16-0750, ORDER NO. 4/3.

Respectfully submitted,

John F. McNulty Reg. No. 23,028

Paul & Paul

2900 Two Thousand Market St.

Philadelphia, PA 19103

(215) 568-4900

## PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

٠.	licant's or agent's file reference 0204PCT	FOR FURTHER A	CTION	See Form PCT/IPEA/416			
1	rnational application No. TÆP2004/014008	International filing date 07.12.2004	(day/month/year)	Priority date (day/month) 19.12.2003	lyear)		
International Patent Classification (IPC) or national classification and IPC INV. C25D17/28							
Applicant ATOTECH DEUTSCHLAND GMBH							
1.	<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>						
2.	This REPORT consists of a total of 5 sheets, including this cover sheet.						
3.	This report is also accompanied by ANNEXES, comprising:						
	a. 🗵 sent to the applicant and to		•				
	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.						
	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in celectronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4.	4. This report contains indications relating to the following items:						
	☑ Box No. I Basis of the report						
	☐ Box No. II Priority						
☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industria			ep and industrial applic	ability			
	☐ Box No. IV Lack of unity of invention						
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
	☐ Box No. VI Certain docume						
•	_	n the international app					
	☐ Box No. VIII Certain observations on the international application						
Date	of submission of the demand	Date of completion of this	report				
12.0	01.2006	08.06.2006					
	e and mailing address of the international minary examining authority:	al	Authorized officer		Addres Potentes		
	European Patent Office - P.B. NL-2280 HV Rijswijk - Pays Ba Tel. +31 70 340 - 2040 Tx: 31 Fax: +31 70 340 - 3016	as	Desbois, V Telephone No. +31 70 340	1-8952	Charles Parks		

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/014008

	Box No. I Basis of the report				
1.	<ol> <li>With regard to the language, this report is based on the international application in the language in wh filed, unless otherwise indicated under this item.</li> </ol>				
	which is the language of a t international search (und publication of the interna	slations from the original language into the following language , ranslation furnished for the purposes of: der Rules 12.3 and 23.1(b)) itional application (under Rule 12.4) examination (under Rules 55.2 and/or 55.3)			
2.	With regard to the <b>elements*</b> of the international application, this report is based on <i>(replacement sheets have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in report as "originally filed" and are not annexed to this report):</i>				
	Description, Pages				
	1-19	as originally filed			
	Claims, Numbers				
	2-21	as originally filed			
	1, 22-24	received on 12.01.2006 with letter of 12.01.2006			
	Drawings, Sheets	•			
	1/5-5/5	as originally filed			
	☐ a sequence listing and/or an	y related table(s) - see Supplemental Box Relating to Sequence Listing			
3.	<ul> <li>□ The amendments have resulted in the cancellation of:</li> <li>□ the description, pages</li> <li>□ the claims, Nos.</li> <li>□ the drawings, sheets/figs</li> <li>□ the sequence listing (specify):</li> <li>□ any table(s) related to sequence listing (specify):</li> </ul>				
4.	<ul> <li>□ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</li> <li>□ the description, pages</li> <li>□ the claims, Nos.</li> <li>□ the drawings, sheets/figs</li> <li>□ the sequence listing (specify):</li> <li>□ any table(s) related to sequence listing (specify):</li> </ul>				
	* If item 4 applies so	ome or all of these sheets may be marked "superseded "			

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-24

No: Claims

Inventive step (IS)

Yes: Claims

No: Claims

1-24

Industrial applicability (IA)

Yes: Claims

1-24

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

#### Re Item V.

Reference is made to the following documents:

D1: EP 0 959 153 A (PROCESS AUTOMATION INTERNATIONAL LIMITED;

SHIPLEY COMPANY LLC) 24 November 1999

D3: DE 40 35 932 A1 (HOELLMUELLER, HANS, 7033 HERRENBERG, DE; HANS

HOELLMUELLER MASCHINENBA) 14 May 1992 (1992-05-14)

## 1. Major clarity remark

Claim 1 lacks of clarity (Art. 6 PCT) since the word "group" in the expression "a group of conveying members" is vague. Thus, it makes it difficult to clearly differentiate the subject-matter of claim 1 from the available prior art.

Moreover, it does not appear clearly that one particular recess can be used for different insertion elements (Art. 6 PCT). Therefore claim 1 has been understood in the broader meaning for the assessment of novelty and inventive step (the broader meaning being: insertion elements have different shapes/dimensions, and the recesses have different shapes/dimensions accordingly). This interpretation seems to be logical, since claim 23 precises that the recesses have the same dimensions and shapes, which means that this feature is not included in the scope of claim 1.

### 2. Independent claim

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1** does not involve an inventive step in the sense of Article 33(3) PCT.

The document D3 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A treatment unit for the wet-chemical or electrolytic treatment of flat workpieces (col. 1, I. 3-10),

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2004/014008

comprising conveying members for transporting the workpieces in the unit on a conveying path (fig. 1), characterized in that the treatment unit further comprises

- a) carrier elements with recesses (fig. 2, feature 15), said carrier elements being oriented to be parallel to the conveying path and
- b) groups of conveying members (shafts 4 and 5, or 22 and 23) fitted into the recesses

The subject-matter of claim 1 differs from this known treatment unit in that the conveying members of the group are carried via insertion members, which are fitted into the recesses.

The use of insertion members, such as described in claim 1, does not seem to have a particular effect, since a group of conveying members can be fitted directly in the recesses, without the need of insertion elements. Since no effect can be identified, no problem to be solved can be established.

Therefore claim 1 does not seem to involve an inventive step (Art. 33(3) PCT).

### 3. Dependent claims

Dependent claims 2-24 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step (Article 33(2) and (3) PCT), see **D1**, **D2**, **D3**, passages cited in the search report.

1

PCT/EP2004/014008 Atotech Deutschland GmbH January 12, 2006

EPO - DG 1
(12 01 2006

#### **Patent Claims**

- 1. A treatment unit for the wet-chemical or electrolytic treatment of flat workpieces, comprising conveying members for transporting the workpieces in the unit on a conveying path, characterized in that the treatment unit further comprises
- a) carrier elements (4, 5) with recesses (21), said carrier elements being oriented to be parallel to the conveying path and
- b) at least one module system for carrying or securing the conveying members (6, 6', 6", 7), said module system comprising insertion elements (13, 14, 26), said insertion elements (13, 14, 26) being configured such that they are fitted into the recesses (21) of the carrier elements (13, 14, 26),

characterized in that the insertion elements (13, 14, 26) are designed such that they are able to carry or secure at least one item selected from the group comprising a group of conveying members located on one side of the conveying path, a treatment device and a group of treatment devices.

- 22. The treatment unit according to any one of the preceding claims, characterized in that the recesses (21) are arranged in the carrier elements (4, 5) according to a uniform pattern.
- 23. The treatment unit according to any one of the preceding claims, characterized in that all the recesses (21) comprise the same dimensions and shapes, or a few groups of differently configured recesses are provided in the carrier elements (4, 5).
- 24. Use of the treatment unit according to any one of claims 1 23 for treating flat workpieces in a horizontal conveyorized line.